

Application No. 09/609,269
Amendment "C" dated March 8, 2005
Reply to Office Action mailed January 7, 2005

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) In a gateway computer system coupled between at least one computer system and at least one remote ~~computer-wireless~~ system, a method of the gateway computer system dynamically converting data from a first format as received at the gateway computer system from an originating computer system into a second data format compatible with a remote computer system prior to transmitting the data to the remote ~~computer-wireless~~ system so that the remote computer system does not have to convert the data into the second data format, the method comprising:

~~receiving a message from data in a first data format from an~~ originating computing system ~~that includes data in a first data format and that is intended for a remote wireless system that has an associated telephone number that is addressed to a remote computer system;~~

~~examining the message and identifying the telephone number of the remote wireless device, which is included as part of the message;~~

~~determining, based in part on the telephone number, that the wireless system only recognizes data in one or more formats that are different than the first data format;~~

~~an act of identifying a sequence of format conversion modules that, when executed in sequence, converts the data from the first data format into the a second data format that is recognized by the wireless system, wherein the act of identifying is based on the address-telephone number associated with the remote wireless computer system;~~

~~an act of converting the data from the first data format into an intermediate data format using a first format conversion module in the sequence of data conversion modules; and~~

~~an act of converting the data from the intermediate data format into the second data format using at least two one second format conversion modules-module in the~~

Application No. 09/609,269
Amendment "C" dated March 8, 2005
Reply to Office Action mailed January 7, 2005

sequence of data conversion modules, each of the second format conversion modules converting the data into different formats;

upon converting the data to the second data format, transmitting the data to the remote ~~computer~~ wireless system.

2. (Cancelled)

3. (Previously Presented) A method in accordance with Claim 1, further including identifying the first data format by reading a content type field associated with the data.

4. (Currently Amended) A method in accordance with Claim 1, wherein the act of identifying the second data format comprises the following:

an act of reading the telephone number from a destination address field associated with the data;

an act of querying a database for a data format recognized by the remote computer system that is represented by the destination address within the destination address field; and

an act of determining that the resulting data format returned from database is the second data format.

5. (Cancelled).

6. (Currently Amended) A method in accordance with Claim 5~~1~~, wherein the originating computer system comprises a server computer system.

7. (Original) A method in accordance with Claim 1, wherein the originating computer system comprises a wireless device.

Application No. 09/609,269
Amendment "C" dated March 8, 2005
Reply to Office Action mailed January 7, 2005

8. (Original) A method in accordance with Claim 7, wherein the remote computer system comprises a server computer system.

9-10. (Cancelled).

11. (Previously Presented) A method in accordance with Claim 1, further comprising the following:

an act of receiving the data using a first protocol module that is compatible with receiving data from the originating computer system; and

an act of determining a second protocol module that is compatible with delivering data to the remote computer system; and

an act of transmitting the converted data to the remote computer system using the second protocol module.

12. (Previously Presented) A method in accordance with Claim 1, further comprising the following:

an act of receiving the data using a first network driver module that is compatible with receiving data from the originating computer system; and

an act of determining a second network driver module that is compatible with delivering data to the remote computer system; and

an act of transmitting the converted data to the remote computer system using the second network driver module.

Application No. 09/609,269
Amendment "C" dated March 8, 2005
Reply to Office Action mailed January 7, 2005

13. (Previously Presented) A computer program product for use in a gateway computer system coupled between at least one originating computer system and at least one remote ~~computer-wireless~~ system, the computer program product for implementing a method of dynamically converting data from a first format as received at the gateway computer system from an originating computer system into a second data format compatible with a remote computer system prior to transmitting the data to the remote computer system so that the remote ~~computer-wireless~~ system does not have to convert the data into the second data format, the computer program product comprising a computer-readable medium having computer-executable instructions for performing the following:

~~receiving a message from data in a first data format from an~~ originating computing system that includes data in a first data format and that is intended for a remote wireless system that has an associated telephone number that is addressed to a remote computer system;

examining the message and identifying the telephone number of the remote wireless device, which is included as part of the message;

determining, based in part on the telephone number, that the wireless system only recognizes data in one or more formats that are different than the first data format;

~~an act of identifying a sequence of format conversion modules that, when executed in sequence, converts the data from the first data format into the a second data format that is recognized by the wireless system, wherein the act of identifying is based on the address telephone number associated with the remote wireless computer system;~~

~~an act of converting the data from the first data format into an intermediate data format using a first format conversion module in the sequence of data conversion modules; and~~

~~an act of converting the data from the intermediate data format into the second data format using at least two one second format conversion modules module in the sequence of data conversion modules, each of the second format conversion modules converting the data into different formats;~~

upon converting the data to the second data format, transmitting the data to the remote ~~computer-wireless~~ system.

Application No. 09/609,269
Amendment "C" dated March 8, 2005
Reply to Office Action mailed January 7, 2005

14. (Original) A computer-program product in accordance with Claim 13, wherein the computer-readable medium comprises a physical storage medium.

15. (Cancelled)

16. (Previously Presented) A computer-program product in accordance with Claim 13, wherein the act of identifying the first data format comprises an act of reading a content type field associated with the data.

17. (Currently Amended) A computer-program product in accordance with Claim 13, wherein identifying the second data format comprises:

an act of reading the telephone number from a destination address field associated with the data;

an act of querying a database for a data format recognized by the remote computer system that is represented by the destination address within the destination address field;
and

an act of determining that the resulting data format returned from database is the second data format.

Application No. 09/609,269
Amendment "C" dated March 8, 2005
Reply to Office Action mailed January 7, 2005

18. (Previously Presented) A computer-program product in accordance with Claim 13, further comprising computer-executable instructions for performing the following:

an act of receiving the data using a first protocol module that is compatible with receiving data from the originating computer system; and

an act of determining a second protocol module that is compatible with delivering data to the remote computer system; and

an act of transmitting the converted data to the remote computer system using the second protocol module.

19. (Previously Presented) A computer-program product in accordance with Claim 13, further comprising computer-executable instructions for performing the following:

an act of receiving the data using a first network driver module that is compatible with receiving data from the originating computer system; and

an act of determining a second network driver module that is compatible with delivering data to the remote computer system; and

an act of transmitting the converted data to the remote computer system using the second network driver module.

Application No. 09/609,269
Amendment "C" dated March 8, 2005
Reply to Office Action mailed January 7, 2005

20. (Currently Amended) In a gateway computer system coupled between at least one originating computer system and at least one remote ~~computer~~wireless system, a method of the gateway computer system dynamically converting data in a first format as received at the gateway computer system from an originating computer system into a second data format compatible with a remote computer system prior to transmitting the data to the remote ~~computer~~wireless system so that the remote computer system does not have to convert the data into the second data format, the method comprising the following:

receiving a message from data in a first data format from an originating computing system that includes data in a first data format and that is intended for a remote wireless system that has an associated telephone number that is addressed to a remote computer system;

examining the message and identifying the telephone number of the remote wireless device, which is included as part of the message;

determining, based in part on the telephone number, that the wireless device only recognizes data in one or more formats that are different than the first data format;

~~receiving data in a first data format from an originating computing system that is addressed to a remote computer system;~~

an act of identifying a plurality of sequences of format conversion modules that each, when executed in sequence, converts the data from the first data format into ~~the a~~ second data format comprising a format that the wireless device recognizes, wherein the act of identifying a plurality of sequences includes identifying an address of the remote computer system to which the data is addressed and wherein the act of identifying the plurality of sequences is based on the address-telephone number associated with the remote ~~computer~~wireless system; and

a step for converting the data from the first data format into the second data format using one of the plurality of the sequences of format conversion modules; and upon converting the data to the second data format, transmitting the data to the remote ~~computer~~wireless system.

Application No. 09/609,269
Amendment "C" dated March 8, 2005
Reply to Office Action mailed January 7, 2005

21. (Previously Presented) A method in accordance with Claim 20, wherein the step for converting the data from the first data format into the second data format comprises the following:

an act of converting the data from the first data format into an intermediate data format using the first format conversion module in the one of the plurality of sequences of data conversion modules; and

an act of converting the data from the intermediate data format into the second data format using at least the second format conversion module in the one of the plurality of sequences of data conversion modules.

22. (Cancelled)

23. (Previously Presented) A method in accordance with Claim 20, wherein the first data format is identified from a content type field associated with the data.

24. (Currently Amended) A method in accordance with Claim 20, wherein the act of identifying the second data format comprises the following:

an act of reading the telephone number from a destination address field associated with the data;

an act of querying a database for a data format recognized by the remote computer system that is represented by the destination address within the destination address field; and

an act of determining that the resulting data format returned from database is the second data format.

25. (Cancelled).

Application No. 09/609,269
Amendment "C" dated March 8, 2005
Reply to Office Action mailed January 7, 2005

26. (Currently Amended) A method in accordance with Claim ~~25~~20, wherein the originating computer system comprises a server computer system.

27. (Original) A method in accordance with Claim 20, wherein the originating computer system comprises a wireless device.

28. (Original) A method in accordance with Claim 27, wherein the remote computer system comprises a server computer system.

29. (Original) A method in accordance with Claim 20, wherein the originating and remote computer system both comprise wireless devices.

30. (Original) A method in accordance with Claim 20, wherein the originating and remote computer systems both comprise server computer systems.

31. (Previously Presented) A method in accordance with Claim 20, further comprising the following:

an act of receiving the data using a first protocol module that is compatible with receiving data from the originating computer system; and

an act of determining a second protocol module that is compatible with delivering data to the remote computer system; and

an act of transmitting the converted data to the remote computer system using the second protocol module.

Application No. 09/609,269
Amendment "C" dated March 8, 2005
Reply to Office Action mailed January 7, 2005

32. (Previously Presented) A method in accordance with Claim 20, further comprising the following:

an act of receiving the data using a first network driver module that is compatible with receiving data from the originating computer system; and

an act of determining a second network driver module that is compatible with delivering data to the remote computer system; and

an act of transmitting the converted data to the remote computer system using the second network driver module.

Application No. 09/609,269
Amendment "C" dated March 8, 2005
Reply to Office Action mailed January 7, 2005

33. (Previously Presented) A computer program product for use a gateway computer system coupled between at least one originating computer system and at least one remote ~~computer-wireless~~ system, the computer program product for implementing a method of dynamically converting data in a first format as received from an originating computer system into a second data format compatible with a remote computer system prior to transmitting the data to the remote ~~computer-wireless~~ system so that the remote computer system does not have to convert the data into the second data format, the computer program product comprising a computer-readable medium having computer-executable instructions for performing the following:

receiving a message from data in a first data format from an originating computing system that includes data in a first data format and that is intended for a remote wireless system that has an associated telephone number that is addressed to a remote computer system;

examining the message and identifying the telephone number of the remote wireless device, which is included as part of the message;

determining, based in part on the telephone number, that the wireless device only recognizes data in one or more formats that are different than the first data format;

receiving data in a first data format from an originating computing system that is addressed to a remote computer system;

an act of identifying a plurality of sequences of format conversion modules that each, when executed in sequence, converts the data from the first data format into the a second data format comprising a format that the wireless device recognizes, wherein the act of identifying a plurality of sequences includes identifying an address of the remote computer system to which the data is addressed and wherein the act of identifying the plurality of sequences is based on the address-telephone number associated with the remote ~~computer-wireless~~ system; and

a step for converting the data from the first data format into the second data format using one of the plurality of the sequences of format conversion modules; and upon converting the data to the second data format, transmitting the data to the remote ~~computer-wireless~~ system.

Application No. 09/609,269
Amendment "C" dated March 8, 2005
Reply to Office Action mailed January 7, 2005

34. (Original) A computer-program product in accordance with Claim 33, wherein the computer-readable medium comprises a physical storage medium.

Application No. 09/609,269
Amendment "C" dated March 8, 2005
Reply to Office Action mailed January 7, 2005

35. (Previously Presented) A gateway computer system configured to be coupled between at least one originating computer system and at least one remote ~~computer-wireless~~ system, the gateway computer system configured to receive data having a first data format from an originating computer system and then to subsequently transmit the data in a second format to a remote ~~computer-wireless~~ system such that the remote ~~computer-wireless~~ system does not have to convert the data into the second data format, the gateway computer system comprising:

means for receiving a message from data in a first data format from an originating computing system that includes data in a first data format and that is intended for a remote wireless system that has an associated telephone number that is addressed to a remote computer system;

means for examining the message and identifying the telephone number of the remote wireless device, which is included as part of the message;

means for determining, based in part on the telephone number, that the wireless device only recognizes data in one or more formats that are different than the first data format;

~~receiving data in a first format from an originating computer system that is addressed to a remote computer system;~~

means for identifying an address of the remote computer system to which the data is addressed;

a plurality of format conversion modules including:

a plurality of first format conversion modules configured to convert data having the first data format into intermediate data formats; and

a plurality of second format conversion modules configured to convert data having the intermediate data formats into ~~the~~ a second data format comprising a format that the wireless device recognizes; and

means for identifying different sequences of first and second format conversion modules that are a subset of the plurality of format conversion modules and that, when executed in sequence, result in the data being converted from the first data format into the second data format, wherein identifying the different sequences is based upon the address telephone number associated with the data and the remote ~~computer-wireless~~ system.

Application No. 09/609,269
Amendment "C" dated March 8, 2005
Reply to Office Action mailed January 7, 2005

36. (Original) The gateway computer system in accordance with Claim 35, wherein the originating computer system comprises a server computer system.

37. (Cancelled).

38. (Original) The gateway computer system in accordance with Claim 35, wherein the originating computer system comprises a wireless device.

39. (Original) The gateway computer system in accordance with Claim 38, wherein the remote computer system comprises a server computer system.

40. (Cancelled).

41. (Original) The gateway computer system in accordance with Claim 35, wherein the originating and remote computer systems both comprise a server computer system.

42. (Previously Presented) A method as recited in claim 1, wherein the act of identifying the sequence is based on an amount of time it will take to convert the data from the first data format into the second data format.

43. (Previously Presented) A method as recited in claim 20, wherein the step for converting the data from the first data format into the second data format using one of the plurality of the sequences includes selecting the one of the plurality of sequences based on an amount of time it will take to convert the data from the first data format into the second data format.

44. (Previously Presented) A method as recited in claim 1, wherein the second data format corresponds to a network protocol that is proprietary with the remote computer system.

Application No. 09/609,269
Amendment "C" dated March 8, 2005
Reply to Office Action mailed January 7, 2005

45. (Previously Presented) A method as recited in claim 1, wherein the address of the remote computer system is provided to the gateway when the remote computer system registers with the gateway.

46. (Previously Presented) A method as recited in claim 1, wherein the address comprises a telephone number.

47. (Cancelled).